

Directions: Read the nonfiction article and the poem and answer the questions that follow.

Who Wants a Spiny Snack?

Adapted from: ReadWords

This article is provided courtesy of the American Museum of Natural History.

Not many animals! How the spiny puffer stays safe in the ocean

A shark glides through the warm water, searching for its next meal. It spots an ordinary brown fish swimming slowly in the clear waters ahead.



But as the shark approaches, PUFF-PUFF-PUFF! The fish puffs out into a round, spiny ball. The startled shark swims away. The pufferfish is safe for now — at least until the next shark or big fish swims by.

The ocean can be a dangerous place for small fish like the puffer. Its waters are full of **predators** like sharks, squid, and bigger fish that eat small fish. But pufferfish have **adaptations** that protect them from **predators**.



All animals have **adaptations** to stay alive. An **adaptation** is a body part or behavior that helps an animal live in its environment. **Predators** have **adaptations** that help them hunt. A shark's powerful, torpedo-shaped tailfin and sharp teeth are two **adaptations**.

Other animals have **adaptations** that provide protection from **predators**. These animals may be fast enough to



escape **predators**. Or they might use camouflage, special patterns or colors that help them hide in their environment.



Can you find the flounder?

But some animals don't run or hide. They have bodies that are hard to eat. Just picture the sharp spines of a porcupine, hedgehog, or sea urchin. Few **predators** are large or tough enough to make a meal of those animals!



Porcupines have long sharp spines that protect them.

Some toads and snakes have their own way to discourage **predators**. They puff themselves up to look larger. The bigger an animal, the harder it is to catch and eat. Pufferfish combine both of these **adaptations**. They puff up AND they have long, sharp spines.



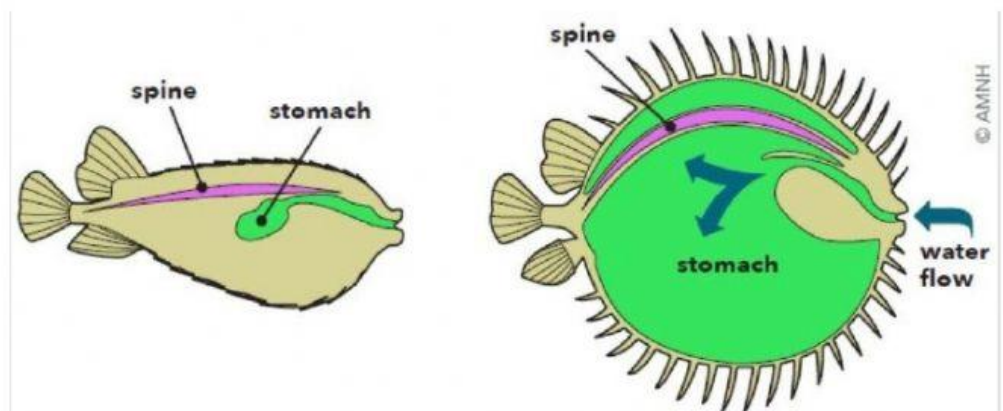
A pufferfish's skin is hard and covered with sharp spines.

Swimming along, a pufferfish looks like any other fish. But when it is **threatened**, it swells up suddenly like a big balloon. When this happens, it's easy to see why some people call it balloonfish. But this fish is no soft, squishy balloon. Its skin becomes rigid, with sharp spines sticking out in all directions. Usually, these spines lie flat against the side of the fish. When the fish puffs up, the outer skin stretches out and pulls the spines up.

How does the pufferfish make this amazing transformation?

Despite its nickname, it doesn't blow itself up with air like a balloon. Instead, it fills up with water. The fish pumps a huge amount of water through its mouth into its stomach. Filled with water, its stomach becomes almost one hundred times larger. The stomach can expand like this because it's usually crumpled into many tiny folds. As water rushes in, the stomach unfolds. To make room for the swelling stomach, other organs like the liver and intestines are pushed to the side.

A spiny puffer can change from an ordinary-looking fish into a menacing spiny ball in a few seconds. Then only the biggest animals dare to eat it. The ocean may be



full of dangers, but **adaptations** like sharp spines and puffing up help keep the puffer safe.

- 1.) The author's main purpose for writing this article is to -
- a.) Describe why different kinds of sharks have different adaptations
 - b.) Describe the different predators that are likely to hunt porcupines
 - c.) Describe what happens when a predator eats a spiny pufferfish
 - d.) How a pufferfish puffs up into a round spiny ball
- 2.) Why might the author have included photographs of the flounder and the porcupine?
- a.) To force the reader to decide which looks more like a pufferfish
 - b.) To show the reader examples of different animals with adaptations that protect them from predators
 - c.) To suggest that a flounder and a porcupine would probably be better than a pufferfish at fighting off predators
 - d.) To prove that animals that live on land and animals that live in the ocean are very different from each other.
- 3.) What is the main idea of this text?
- a.) The ocean can be a dangerous place for small fish like the pufferfish because its waters are full of predators.
 - b.) Predators like sharks have adaptations that help them hunt other animals.
 - c.) Many animals have sharp spines, including porcupines, hedgehogs, sea urchins, and pufferfish.
 - d.) Adaptations like sharp spines and puffing up help keep pufferfish safe from predators.

4.) Select all of the following words that use the suffix -ed in the same way as the word threatened from the passage:

harmed	laughed	snowed
predator	bed	shred

To Catch a Fish

BY ELOISE GREENFIELD

It takes more than a wish
to catch a fish
you take the hook
you add the bait
you concentrate
and then you wait
you wait you wait
but not a bite
the fish don't have
an appetite
so tell them what
good bait you've got
and how your bait
can hit the spot
this works a whole
lot better than
a wish
if you really
want to catch
a fish

5.) The speaker of this poem is most likely -

- a.) a fish
- b.) the bait
- c.) a teacher
- d.) a fisherman

6.) After reading the poem, the reader can conclude -

- a.) the speaker has gone fishing before
- b.) the speaker has never caught a fish
- c.) fish are easy to catch
- d.) if you wish for a fish you will catch one

7.) Which of the following words is an antonym of the word concentrate in line 5 of the poem?

- a.) unfocused
- b.) think
- c.) complete
- d.) center

8.) Why does the author say "you wait" three times in the poem?

- a.) The author wants to make the poem rhyme.
- b.) The author made a mistake when writing the poem.
- c.) The author wants the reader to know you might need to wait a long time.
- d.) The author enjoys waiting for fish to bite the bait on their hook.

9.) Read the dictionary definition below for the word **hook**.

Hook: n. 1. A piece of metal or other material, curved or bent back at an angle, for catching hold 2. A thing designed to catch people's attention 3. a flight or course of a ball that deviates from straight in a direction opposite to the dominant hand of the player propelling it 4. a short blow delivered with a circular motion by a boxer while the elbow remains bent and rigid

Which of the dictionary meanings of hook is used in line 3 of the poem?

- a.) 1
- b.) 2
- c.) 3
- d.) 4

10. Which of the following is one way that the nonfiction article and the poem are similar?

They both describe the adaptations of animals.
The main topic of both is fish.
Both authors do not catch any fish.
Both are written to entertain the reader with a story.